

**Part Number: PT29A-12160-XX**

**Kit Contents**

Item #	Quantity Req'd.	Description
1	1	Rear Spoiler
2	2	Hardware Bag

**Hardware Bag Contents**

Item #	Quantity Req'd.	Description
1	2	M6 Assembly Nuts
2	2	Grommet Inserts
3	1	Hole Plug

**Additional Items Required For Installation**

Item #	Quantity Req'd.	Description
1	1	Drill Template (PT29A-12160-TL)

**Conflicts**

None
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**Recommended Tools**

<b>Personal &amp; Vehicle Protection</b>	<b>Notes</b>
Safety Glasses	
Blankets	
Masking Tape	2" Wide
Small Parts Tray	
<b>Special Tools</b>	<b>Notes</b>
Non-intrusive IR Temperature Probe	
Heat Gun	Master Heat Gun HG-301A or equivalent
<b>Installation Tools</b>	<b>Notes</b>
Center punch	
Drill Motor	½" Chuck
Drill Bit	3mm (1/8"), 9mm (23/64"), 14.5mm (9/16")
Drill Stop	9mm & 14.5mm
Hole De-burring Tool	
Flexible Magnet	
Ratchet	
Socket	10mm Deep Well Magnetic
Extension	6" & 3"
Torque Wrench	0-100 lbf•in
Panel Clip Removal Tool	Panel Pry Tool # 1
Shop Vacuum	
Hole Saw	25mm (1")
<b>Special Chemicals</b>	<b>Notes</b>
Cleaner	i.e. Soap & Water
Sealant	3M™ Ultra-Pro Body Sealant

**General Applicability**

All iM models
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**Recommended Sequence of Application**

Item #	Accessory
1	

\*Mandatory

**Vehicle Service Parts** (may be required for reassembly)

Item #	Quantity Req'd.	Description
1	1	Hardware Bag (PT29A-12160-AB)

**Legend**

**STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.

**OPERATOR SAFETY:** Use caution to avoid risk of injury.

**CAUTION:** A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.

**TOOLS & EQUIPMENT:** Used in Figures calls out the specific tools and equipment recommended for this process.

**REVISION MARK:** This mark highlights a change in installation with respect to previous issue.

**SAFETY TORQUE:** This mark indicates that torque is related to safety.



Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Scion dealer for a copy of this document.

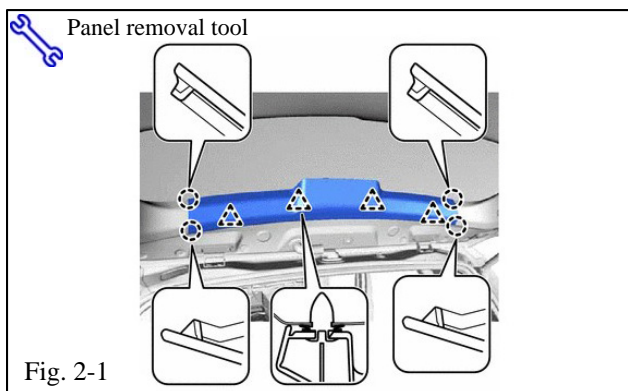
### 1. Prepare the Vehicle.

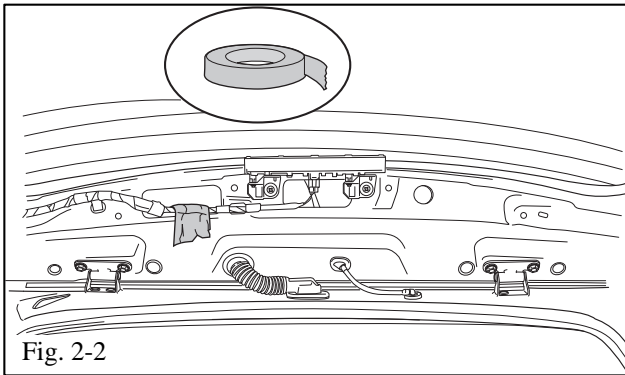
- (a) Installation of the rear wind deflector should not take place until the following have been completed:
  - (1) The car is washed.
  - (2) The back door and rear wind deflector should be a minimum of 60°F for proper set-up of adhesive tape. Use a hot air blower to heat the surface if the temperature is below 60°F.
- (b) Disconnect the tonneau support cables from both sides.
- (c) Open the rear door and place blankets to protect the sheet metal (Fig. 1-1).



### 2. Remove the Door Trim Panel.

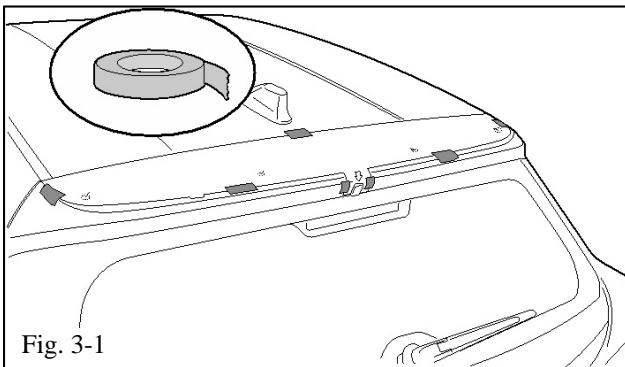
- (a) Disengage the 4 claws and 4 clips; remove the back door upper trim panel assembly (Fig. 2-1).



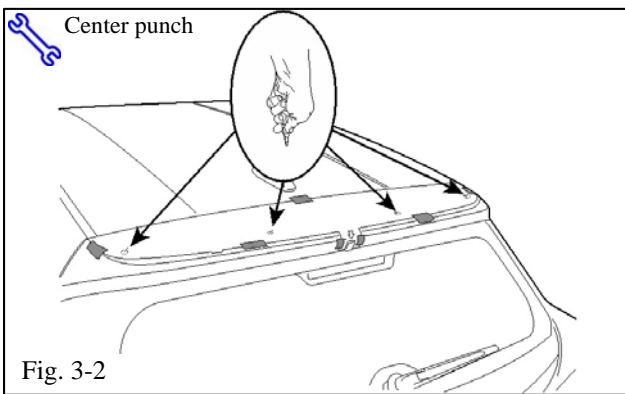


- ⚠ (b) Secure the exposed wire to the outside of the sheet metal with tape (Fig. 2-2).

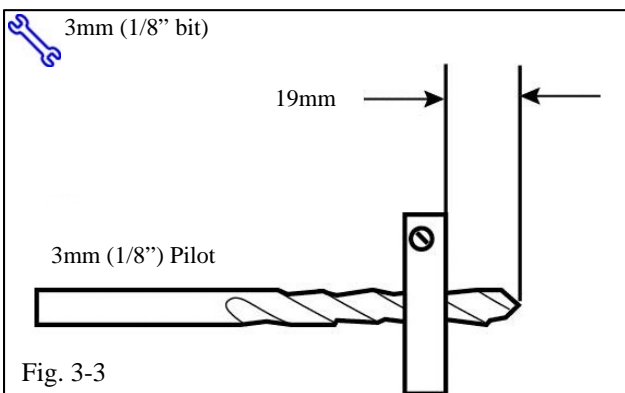
**3. Prepare to Install the Rear Wind Deflector.**



- (a) Align and tape the DIO installation template (Part # PT29A-12160-TL) as per the printed directions (Fig. 3-1).

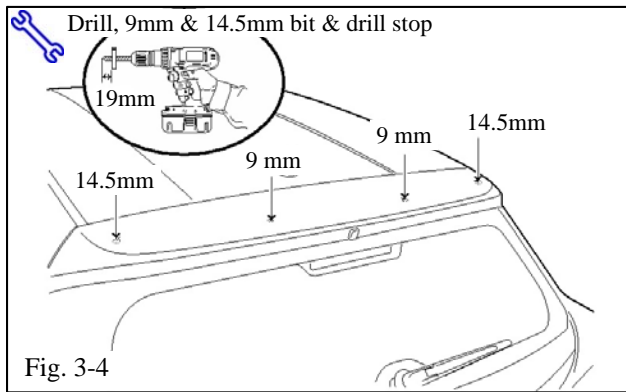


- (b) Center punch each of the four holes as per the holes located in the drill template (Fig. 3-2).
- (c) Remove the template.

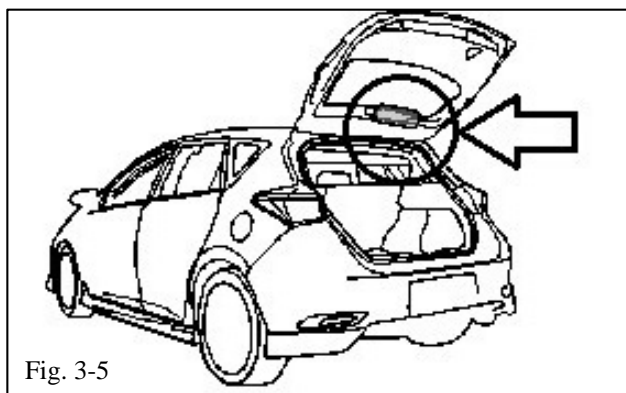


- (d) Drill a 3mm pilot hole in each center punched location. Make sure that the drill bit is equipped with a drill stop set at 19mm. (Fig. 3-3).

**+** **CAUTION:** Eye protection must be worn during all hole drilling.



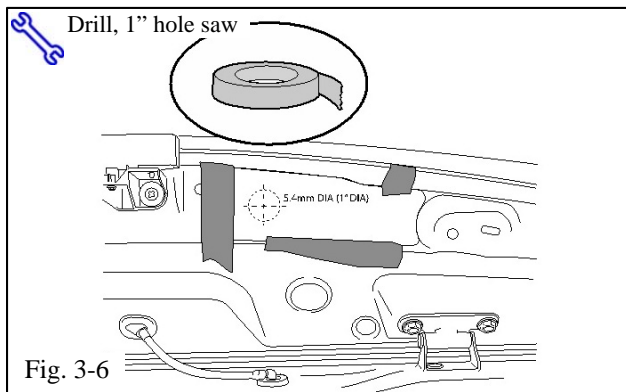
(e) Enlarge each drilled hole to the final sizes as identified on the DIO installation (Fig. 3-4). Make sure that the drill bit is equipped with a drill stop set at 19mm.



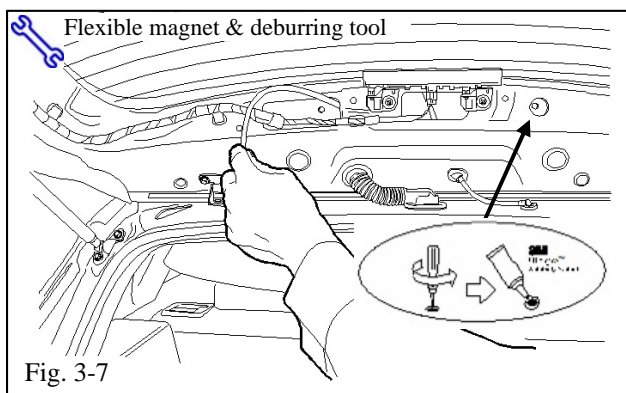
(f) Align and tape the access hole template (PT29A-12160-TEMP) onto the inside of the back door (passenger side only) as shown in Fig. 3-5 & Fig. 3-6.

(g) Center punch the sheet metal as per the hole in the template (Fig. 3-6).

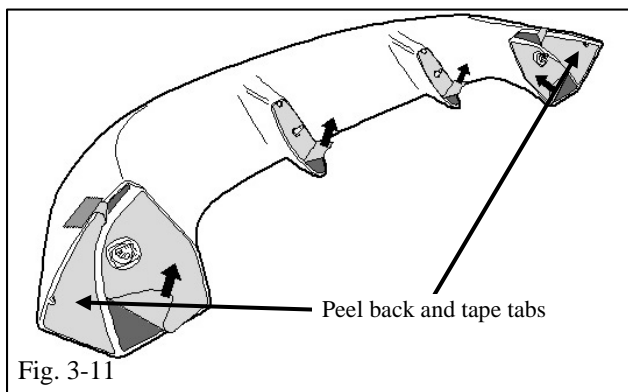
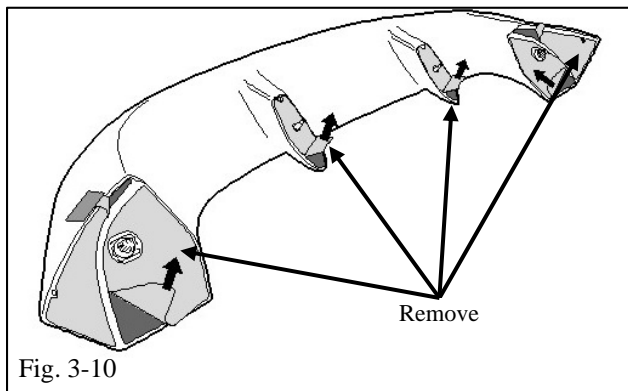
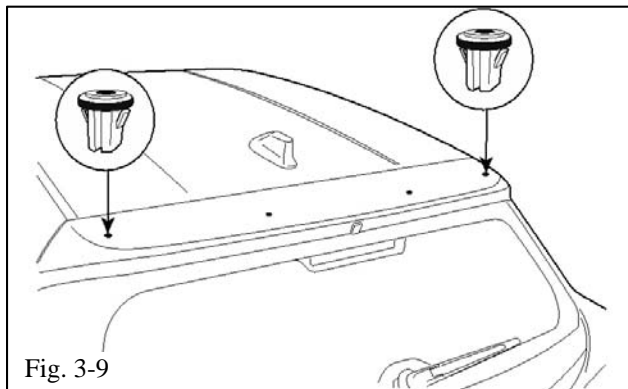
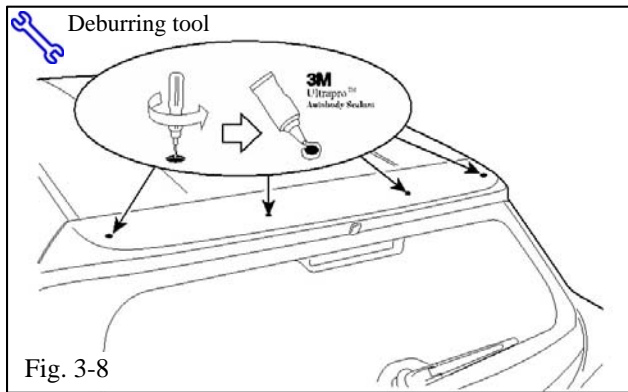
(h) Remove the template and drill the access hole with a 25mm (1") hole saw (Fig. 3-6).



**STOP NOTE:** Create a catch basin with tape and make sure the blankets fully cover the sheet metal below the backdrill hole location.



(i) Use a flexible magnet to remove any metal shavings from the inside of the door cavity as well as around the drilling area. Deburr and apply 3M Ultra-Pro Body Sealant to the backdrilled hole (Fig. 3-7).



- (j) Use a deburring tool to remove any sharp edges on each of the four drilled holes (Fig. 3-8).
- (k) Clean the surface of the deck lid where the spoiler attaches with cleaner and a lint free cloth.
- (l) Apply 3M Ultra-Pro Body Sealant to the drilled holes (Fig. 3-8).
- (m) Insert the plastic grommets into the two outside (14.5mm) holes (Fig. 3-9).
- (n) Remove the four tape liners from the rear wind deflector (Fig. 3-10).

- (j) Peel back and tape the two remaining liners (Fig. 3-11).

**⚠ NOTE:** Once the release liner is removed from the molding, the surface of the foam tape must not be touched!

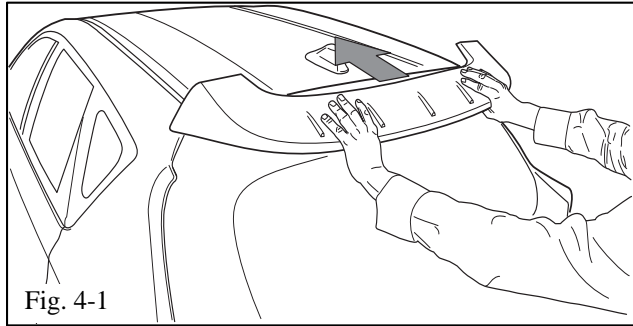


Fig. 4-1

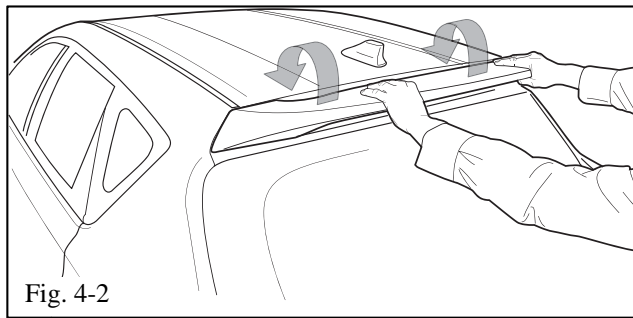


Fig. 4-2

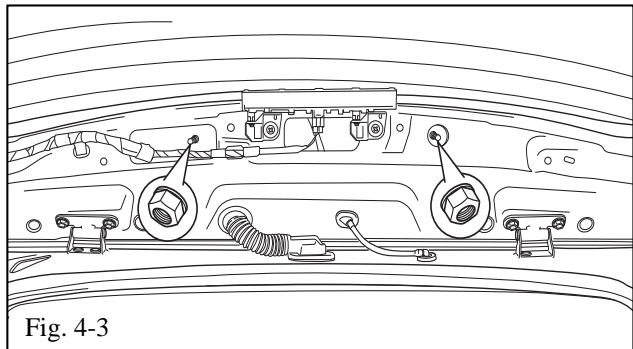


Fig. 4-3

#### 4. Install the Rear Wind Deflector.

(a) Install the rear wind deflector onto the back door by aligning the middle studs on the rear wind deflector to the drilled center holes on the back door. Place the rear wind deflector against the vehicle so that the rearmost surface and tape comes into contact with the sheet metal (Fig. 4-1).

(b) Rotate the rear wind deflector into place on the vehicle, making sure the outside studs engage onto the grommets in the holes (Fig. 4-2).

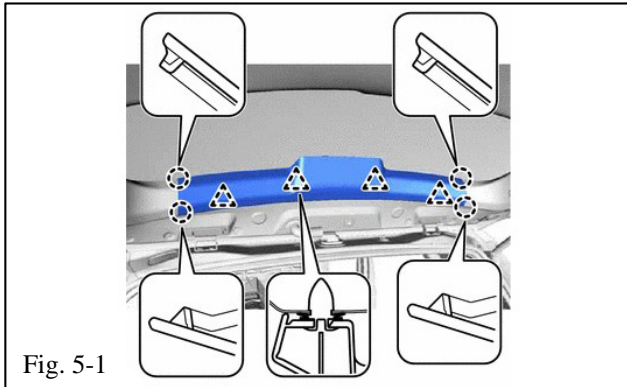
(c) Remove the remaining tape liners and install the rear wind deflector to the rear door by firmly pressing on all surfaces to ensure full contact.

**⚠ NOTE:** The outside attachment locations will ratchet into place.

(d) Install the two M6 nuts onto the center studs and tighten them to 4 N-m (35 in-lbf) (Fig. 4-3).

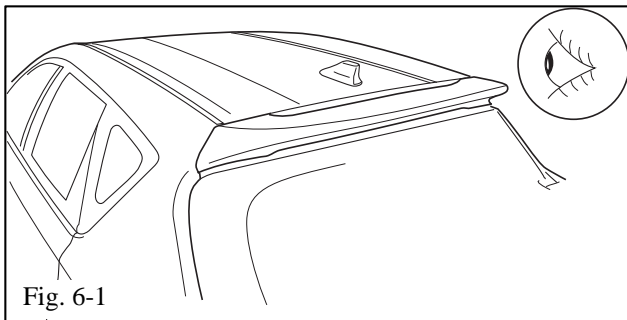
**⚠ Torque: 4 N-m (35 in-lbf)**

(e) Insert the plastic hole plug into the drilled hole and remove the tape securing the wire harness (Fig. 4-3).



**5. Reinstall the Trim Panel.**

- (a) Engage the 4 claws and 4 clips to reinstall the back door upper trim panel assembly (Fig. 5-1).
- (b) Reattach the tonneau support cables from both sides.



**6. Inspect the Rear Wind Deflector.**

- (a) Check the rear wind deflector for proper fitment (Fig. 6-1).
- (b) Ensure the rear wind deflector is centered left to right  $\pm 3\text{mm}$ .
- (c) Ensure all adhesive is properly adhered (maximum gap of 1.5mm).

Checklist - these points **MUST** be checked to ensure a quality installation.

<u>Check:</u>	<u>Look For:</u>
<p><u>Accessory Function Checks</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Verify acceptable gaps between spoiler attaching base and vehicle sheet metal</li> <li><input type="checkbox"/></li> <li><input type="checkbox"/></li> <li><input type="checkbox"/></li> </ul>	<p>Maximum gap of 1.5mm</p>
<p><u>Vehicle Function Checks</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Verify trunk lid operation</li> <li><input type="checkbox"/> Verify CHMSL operation</li> <li><input type="checkbox"/></li> </ul>	<p>When opened, the trunk lid should initially pop up fully and remain in the fully raised position.</p> <p>Ensure light operation when pressing on brake pedal.</p>
<p><u>Vehicle Appearance Check</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Verify all metal shavings are removed.</li> <li><input type="checkbox"/> After accessory installation and removal of protective cover(s), perform a visual inspection.</li> </ul>	<p>Ensure all metal shavings are removed. Vacuum as necessary.</p> <p>Ensure no damage (including scuffs and scratches) was caused during the installation process. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)</p>